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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,605	01/29/2004	Charlie Steinmetz	200314315	1603

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER	
MARTIN, LAURA E	

ART UNIT	PAPER NUMBER
2853	

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/770,605	STEINMETZ ET AL.	
	Examiner	Art Unit	
	Laura E. Martin	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *56-62 and 64-69* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *56-62 and 64-69* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

Claims 56-60, 62, 65, 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. (US 5734401) in view of Wu et al. (US 6059401) and Sato et al. (US 5801737).

Clark et al. teaches a printing-fluid container (figure 1, element 10) having a front face (figure 1, element 22) formed by a single structural piece including a top edge, a bottom edge, a right edge, and a left edge (figure 6); a body (figure 1 element 10) including a latching surface (figure 1, element 72) spaced rearward the front face but intermediate the front face and rear portion and substantially parallel to the front face, wherein the front face and the body are exterior an inner cavity; an air interface (figure 2, element 34) passing into the inner cavity through the front face proximate the top edge and distal the bottom edge; a printing-fluid interface (figure 2, element 32) passing into the inner cavity through the front face proximate the top edge and distal the bottom edge; a first recessed portion (figure 2, element 20) of the front face intermediate the air interface and the printing-fluid interface and proximate the air interface; and a second recessed portion (figure 4, element 38) of the front face intermediate the air interface and the printing-fluid interface and proximate the printing-fluid interface; a third recessed portion (figure 4, element 40) of the front face intermediate the first recessed portion and the right edge and a fourth recessed portion (figure 4, element 36) of the front face intermediate the second recessed portion and the right edge, wherein the first recessed

portion, second recessed portion, third recessed portion, and fourth recessed portion extend into the inner cavity; a free volume of printing fluid held within the inner cavity (figure 1, element 10) defined by the front face (figure 1, element 22) and the body (figure 1, element 10).

Clark et al. does not teach an off-axis printing-fluid container, a rear portion with less width than the width of the front face, or a protruding portion; nor does Clark et al. teach the first recessed portion and the second recessed portion extending into the inner cavity.

Wu et al. teaches an off-axis printing-fluid container configured to hold a volume of fluid (column 2, lines 21-25); a body including a rear portion having a width less than a width of the front face (figure 4); and a bottom edge including a protruding portion extending away from the top edge and aligned with the air interface (figure 4), the first recessed portion, the second recessed portion, and the printing-fluid interface (figure 3, element 40 – multiple recessed nozzles).

Sato et al. teaches a first recessed portion and a second recessed portion extending into the inner cavity (figure 6, elements 4, 5, and 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the printing-fluid container of Clark et al. with the disclosure of Wu et al. in order to improve the ink cartridge quality.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the printing-fluid container of Clark et al. with the disclosure of Sato et al. in order to provide for a more secure ink cartridge within the printer.

Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. (US 5734401), Wu et al. (US 6059401) and Sato et al. (US 5801737), and further in view of Pawlowski, Jr. et al. (US 6113228).

Clark et al., Wu et al., and Sato et al. teach the apparatus of claim 56; however, none teach an electrical interface.

Pawlowski Jr. et al. teaches an electrical interface (figure 3, element 32) on the front face intermediate a first recessed portion and the left edge (figure 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the printing-fluid container of Clark et al. as modified with the disclosure of Pawlowski Jr. et al. in order to improve printing quality.

As per claims 64 and 66, Clark et al., Wu et al., and Sato et al. disclose the claimed invention except for a first recessed portion and a second recessed portion extending at least approximately 15 millimeters into the inner cavity and a third recessed portion and a fourth recessed portion extending at least approximately 12 millimeters into the inner cavity. It would have been obvious to one having ordinary skill in the art at the time the invention was made to extend the first recessed portion and the second recessed portion at least approximately 15 millimeters into the inner cavity and extend the third recessed portion and the fourth recessed portion at least approximately 12 millimeters into the inner cavity, since it has been held that discovering an optimum

value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura E. Martin

5/4/06

MANISH S. SHAH
PRIMARY EXAMINER